44

RAW SEQUENCE LISTING PATENT APPLICATION US/09/115,832B

DATE: 10/01/1999 TIME: 17:15:44

.

Input Set: I115832B.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

```
<110> APPLICANT: Ebner et al.
     <120> TITLE OF INVENTION: Interleukin-20
 2
     <130> FILE REFERENCE: PF399
     <140> CURRENT APPLICATION NUMBER: US/09/115,832B
 5
     <141> CURRENT FILING DATE: 1998-07-15
 6
     <150> EARLIER APPLICATION NUMBER: 60/052,870
 7
     <151> EARLIER FILING DATE: 1997-07-16
 8
     <150> EARLIER APPLICATION NUMBER: 60/060,140
 9
     <151> EARLIER FILING DATE: 1997-09-26
10
     <160> NUMBER OF SEQ ID NOS: 11
11
     <170> SOFTWARE: PatentIn Ver. 2.0
12
     <210> SEQ ID NO 1
13
     <211> LENGTH: 705
     <212> TYPE: DNA
14
15
     <213> ORGANISM: Homo sapiens
16
     <400> SEQUENCE: 1
17
           tccaggcggg cagcagctgc aggctgacct tgcagcttgg cqqaatqgac tgqcctcaca 60
18
           acctgctgtt tcttcttacc atttccatct tcctggggct gggccagccc aggagcccca 120
19
           aaagcaagag gaaggggcaa gggcggcctg ggcccctggc ccctggccct caccaggtgc 180
20
           cactggacct ggtgtcacgg atgaaaccgt atgcccgcat ggaggagtat gagaggaaca 240
21
           tcgaggagat ggtggcccag ctgaggaaca gctcagagct ggcccagaga aagtgtgagg 300
22
           tcaacttgca gctgtggatg tccaacaaqa ggagcctgtc tccctggggc tacaqcatca 360
23
           accacgaccc cagccgtatc cccgtggacc tgccggaggc acggtgcctg tgtctgggct 420
24
           gtgtgaaccc cttcaccatg caggaggacc gcagcatggt gagcgtgccg gtgttcagcc 480
25
           aggttcctgt gcgccgccgc ctctgcccgc caccgccccg cacagggcct tgccgccagc 540
           gcgcagtcat ggagaccatc gctgtgggct gcacctgcat cttctgaatt acctggccca 600
26
27
           gaagccaggc cagcagcccg agaccatcct ccttgcacct ttgtgccaag aaaggcctat 660
28
           705
29
     <210> SEO ID NO 2
     <211> LENGTH: 180
30
31
     <212> TYPE: PRT
32
     <213> ORGANISM: Homo sapiens
33
     <400> SEQUENCE: 2
34
           Met Asp Trp Pro His Asn Leu Leu Phe Leu Leu Thr Ile Ser Ile Phe
35
                                               .10
36
           Leu Gly Leu Gly Gln Pro Arg Ser Pro Lys Ser Lys Arg Lys Gly Gln
37
                                           25
38
          Gly Arg Pro Gly Pro Leu Ala Pro Gly Pro His Gln Val Pro Leu Asp
39
                   35
                                        40
40
          Leu Val Ser Arg Met Lys Pro Tyr Ala Arg Met Glu Glu Tyr Glu Arg
41
                                    55
42
          Asn Ile Glu Glu Met Val Ala Gln Leu Arg Asn Ser Ser Glu Leu Ala
43
                                70
                                                   75
```

Gln Arg Lys Cys Glu Val Asn Leu Gln Leu Trp Met Ser Asn Lys Arg

PAGE: 2 RAW SEQUENCE LISTING DATE: 10/01/1999
PATENT APPLICATION US/09/115,832B TIME: 17:15:44

Input Set: I115832B.RAW

```
90
45
                             85
46
           Ser Leu Ser Pro Trp Gly Tyr Ser Ile Asn His Asp Pro Ser Arg Ile
47
                                           105
48
           Pro Val Asp Leu Pro Glu Ala Arg Cys Leu Cys Leu Gly Cys Val Asn
49
                                       120
           Pro Phe Thr Met Gln Glu Asp Arg Ser Met Val Ser Val Pro Val Phe
50
51
                                    135
52
           Ser Gln Val Pro Val Arg Arg Leu Cys Pro Pro Pro Pro Arg Thr
53
                               150
54
           Gly Pro Cys Arg Gln Arg Ala Val Met Glu Thr Ile Ala Val Gly Cys
55
                                                170
56
           Thr Cys Ile Phe
57
     <210> SEQ ID NO 3
58
59
     <211> LENGTH: 155
60
     <212> TYPE: PRT
61
     <213> ORGANISM: Homo sapiens
62
     <400> SEQUENCE: 3
63
           Met Thr Pro Gly Lys Thr Ser Leu Val Ser Leu Leu Leu Leu Ser
64
65
           Leu Glu Ala Ile Val Lys Ala Gly Ile Thr Ile Pro Arg Asn Pro Gly
66
                                             25
67
           Cys Pro Asn Ser Glu Asp Lys Asn Phe Pro Arg Thr Val Met Val Asn
68
69
           Leu Asn Ile His Asn Arg Asn Thr Asn Thr Asn Pro Lys Arg Ser Ser
70
                                    55
71
           Asp Tyr Tyr Asn Arg Ser Thr Ser Pro Trp Asn Leu His Arg Asn Glu
72
                                70
                                                     75
73
           Asp Pro Glu Arg Tyr Pro Ser Val Ile Trp Glu Ala Lys Cys Arg His
74
                                                 90
75
           Leu Gly Cys Ile Asn Ala Asp Gly Asn Val Asp Tyr His Met Asn Ser
76
                       100
                                           105
77
           Val Pro Ile Gln Gln Glu Ile Leu Val Leu Arg Arg Glu Pro Pro His
78
                                       120
79
           Cys Pro Asn Ser Phe Arg Leu Glu Lys Ile Leu Val Ser Val Gly Cys
80
                                   135
81
           Thr Cys Val Thr Pro Ile Val His His Val Ala
82
           145
                               150
83
     <210> SEQ ID NO 4
     <211> LENGTH: 498
84
85
     <212> TYPE: DNA
     <213> ORGANISM: Homo sapiens
86
     <220> FEATURE:
     <221> NAME/KEY: misc_feature
88
     <222> LOCATION: (13)
90
     <223> OTHER INFORMATION: n equals a, t, g, or c
     <220> FEATURE:
92
     <221> NAME/KEY: misc_feature
93
     <222> LOCATION: (58)
94
     <223> OTHER INFORMATION: n equals a, t, g, or c
```

RAW SEQUENCE LISTING 3 PAGE: DATE: 10/01/1999 TIME: 17:15:44

PATENT APPLICATION US/09/115,832B

Input Set: I115832B.RAW

<220> FEATURE: 95 96 <221> NAME/KEY: misc_feature 97 <222> LOCATION: (173) 98 <223> OTHER INFORMATION: n equals a, t, g, or c <220> FEATURE: 99 100 <221> NAME/KEY: misc feature 101 <222> LOCATION: (179) 102 <223> OTHER INFORMATION: n equals a, t, g, or c 103 <220> FEATURE: <221> NAME/KEY: misc_feature 104 <222> LOCATION: (213) 105 106 <223> OTHER INFORMATION: n equals a, t, g, or c 107 <220> FEATURE: 108 <221> NAME/KEY: misc_feature 109 <222> LOCATION: (288) <223> OTHER INFORMATION: n equals a, t, g, or c 110 111 <220> FEATURE: 112 <221> NAME/KEY: misc feature 113 <222> LOCATION: (312) 114 <223> OTHER INFORMATION: n equals a, t, g, or c 115 <220> FEATURE: 116 <221> NAME/KEY: misc feature 117 <222> LOCATION: (314) 118 <223> OTHER INFORMATION: n equals a, t, g, or c <220> FEATURE: 119 120 <221> NAME/KEY: misc feature <222> LOCATION: (323) 122 <223> OTHER INFORMATION: n equals a, t, g, or c 123 <220> FEATURE: 124 <221> NAME/KEY: misc_feature 125 <222> LOCATION: (331) 126 <223> OTHER INFORMATION: n equals a, t, g, or c 127 <220> FEATURE: 128 <221> NAME/KEY: misc feature <222> LOCATION: (337) 129 130 <223> OTHER INFORMATION: n equals a, t, g, or c 131 <220> FEATURE: <221> NAME/KEY: misc feature 132 133 <222> LOCATION: (340) <223> OTHER INFORMATION: n equals a, t, q, or c 134 135 <220> FEATURE: 136 <221> NAME/KEY: misc feature <222> LOCATION: (348) 137 138 <223> OTHER INFORMATION: n equals a, t, g, or c 139 <220> FEATURE:

<221> NAME/KEY: misc_feature

<221> NAME/KEY: misc feature

<223> OTHER INFORMATION: n equals a, t, g, or c

<222> LOCATION: (363)

<220> FEATURE:

140

141

142

143

144

PAGE: 4 RAW SEQUENCE LISTING DATE: 10/01/1999

PATENT APPLICATION US/09/115,832B TIME: 17:15:44

Input Set: I115832B.RAW

145 <222> LOCATION: (365)

- 146 <223> OTHER INFORMATION: n equals a, t, g, or c
- 147 <220> FEATURE:
- 148 <221> NAME/KEY: misc feature
- 149 <222> LOCATION: (369)
- 150 <223> OTHER INFORMATION: n equals a, t, g, or c
- 151 <220> FEATURE:
- 152 <221> NAME/KEY: misc_feature
- 153 <222> LOCATION: (375)..(376)
- 154 <223> OTHER INFORMATION: n equals a, t, g, or c
- 155 <220> FEATURE:
- 156 <221> NAME/KEY: misc feature
- 157 <222> LOCATION: (386)
- 158 <223> OTHER INFORMATION: n equals a, t, g, or c
- 159 <220> FEATURE:
- 160 <221> NAME/KEY: misc feature
- 161 <222> LOCATION: (391)
- 162 <223> OTHER INFORMATION: n equals a, t, g, or c
- 163 <220> FEATURE:
- 164 <221> NAME/KEY: misc feature
- 165 <222> LOCATION: (393)
- 166 <223> OTHER INFORMATION: n equals a, t, g, or c
- 167 <220> FEATURE:
- 168 <221> NAME/KEY: misc_feature
- 169 <222> LOCATION: (395)
- 170 <223> OTHER INFORMATION: n equals a, t, g, or c
- 171 <220> FEATURE:
- 172 <221> NAME/KEY: misc_feature
- 173 <222> LOCATION: (398)
- 174 <223> OTHER INFORMATION: n equals a, t, g, or c
- 175 <220> FEATURE:
- 176 <221> NAME/KEY: misc_feature
- 177 <222> LOCATION: (403)..(405)
- 178 <223> OTHER INFORMATION: n equals a, t, g, or c
- 179 <220> FEATURE:
- 180 <221> NAME/KEY: misc_feature
- 181 <222> LOCATION: (407)
- 182 <223> OTHER INFORMATION: n equals a, t, g, or c
- 183 <220> FEATURE:
- 184 <221> NAME/KEY: misc_feature
- 185 <222> LOCATION: (409)
- 186 <223> OTHER INFORMATION: n equals a, t, g, or c
- 187 <220> FEATURE:
- 188 <221> NAME/KEY: misc feature
- 189 <222> LOCATION: (413)
- 190 <223> OTHER INFORMATION: n equals a, t, g, or c
- 191 <220> FEATURE:
- 192 <221> NAME/KEY: misc_feature
- 193 <222> LOCATION: (415)..(416)
- 194 <223> OTHER INFORMATION: n equals a, t, g, or c

RAW SEQUENCE LISTING

PATENT APPLICATION US/09/115,832B

DATE: 10/01/1999 TIME: 17:15:44

Input Set: I115832B.RAW

```
195
      <220> FEATURE:
196
      <221> NAME/KEY: misc feature
197
      <222> LOCATION: (420)
198
      <223> OTHER INFORMATION: n equals a, t, g, or c
199
      <220> FEATURE:
      <221> NAME/KEY: misc_feature
200
201
      <222> LOCATION: (423)
202
      <223> OTHER INFORMATION: n equals a, t, g, or c
203
      <220> FEATURE:
      <221> NAME/KEY: misc_feature
204
205
      <222> LOCATION: (428)
206
      <223> OTHER INFORMATION: n equals a, t, g, or c
207
      <220> FEATURE:
208
      <221> NAME/KEY: misc_feature
209
      <222> LOCATION: (433)
210
      <223> OTHER INFORMATION: n equals a, t, g, or c
211
      <220> FEATURE:
212
      <221> NAME/KEY: misc feature
      <222> LOCATION: (435)..(436)
214
      <223> OTHER INFORMATION: n equals a, t, g, or c
215
      <220> FEATURE:
216
      <221> NAME/KEY: misc feature
217
      <222> LOCATION: (440)
      <223> OTHER INFORMATION: n equals a, t, g, or c
218
219
      <220> FEATURE:
220
      <221> NAME/KEY: misc_feature
221
      <222> LOCATION: (450)
222
      <223> OTHER INFORMATION: n equals a, t, g, or c
223
      <220> FEATURE:
224
      <221> NAME/KEY: misc feature
225
      <222> LOCATION: (452)..(453)
226
      <223> OTHER INFORMATION: n equals a, t, g, or c
227
      <220> FEATURE:
228
      <221> NAME/KEY: misc feature
229
      <222> LOCATION: (460)
230
      <223> OTHER INFORMATION: n equals a, t, g, or c
231
      <220> FEATURE:
232
      <221> NAME/KEY: misc feature
233
      <222> LOCATION: (465)
234
      <223> OTHER INFORMATION: n equals a, t, g, or c
235
      <220> FEATURE:
236
      <221> NAME/KEY: misc_feature
237
      <222> LOCATION: (467)
238
      <223> OTHER INFORMATION: n equals a, t, g, or c
239
      <220> FEATURE:
      <221> NAME/KEY: misc_feature
240
241
      <222> LOCATION: (470)
242
      <223> OTHER INFORMATION: n equals a, t, g, or c
243
      <220> FEATURE:
      -??1> NAME/KEY: misc_feature
```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY DATE: 10/01/1999
PATENT APPLICATION US/09/115,832B TIME: 17:15:44 VERIFICATION SUMMARY

Input Set: I115832B.RAW

Line	?	Erro	or/W	Jarning	3			Original Te	,			
	-											
256	W	"N"	or	"Xaa"	used:	Feature	required	aattcggcac	gantccaggc	gggcagcagc	tgcaggct	
258	W	"N"	or	"Xaa"	used:	Feature	required	cccaggagcc	ccaaaagcaa	gaggaagggg	caagggcg	
259	W	"N"	or	"Xaa"	used:	Feature	required	ctcaccaggt	gccactggac	ctggtgtcac	ggntgaaa	
260	W	"N"	or	"Xaa"	used:	Feature	required	atgagaggaa	catcgaggag	atggtggccc	agctgagg	
261	W	"N"	or	"Xaa"	used:	Feature	required	agaaagtttg	angntcaact	ttncaagctt	ntgggtnt	
262	W	"N"	or	"Xaa"	used:	Feature	required	ttncntggng	gttannagta	tgaatncaag	nancncan	
263	W	"N"	or	"Xaa"	used:	Feature	required	tcnggagnac	gtntnncttn	tttttttggn	tnnttgaa	
264	W	"N"	or	"Xaa"	used:	Feature	required	ctagaattgn	tnagggtg			

RAW SEQUENCE LISTING

PATENT APPLICATION US/09/115,832B

DATE: 10/01/1999

TIME: 17:15:44

Input Set: I115832B.RAW

PREVIOUSLY ERRORED SEQUENCES-EDITED

	1	<210>	11															
	2	<211>	126															
	3 ·	<212>	PRT															
	4	<213> Homo sapiens																
	5	<400>	<400> 11															
	6		Met	Asp	Trp	Pro	His	Asn	Leu	Leu	Phe	Leu	Leu	Thr	Ile	Ser	Ile	Phe
	7		1				5					10					15	
	8		Leu	Gly	Leu	Gly	Gln	Pro	Arg	Ser	Pro	Lys	Ser	Lys	Arg	Lys	Gly	Gln
	9					20					25					30		
:	10		Gly	Arg	Pro	Gly	Pro	Leu	Ala	Pro	Gly	Pro	His	Gln	Val	Pro	Leu	Asp
:	11				35					40					45			
:	12		Leu	Val	Ser	Arg	Met	Lys	Pro	Tyr	Ala	Arg	Met	Glu	Glu	Tyr	Glu	Arg
:	13			50					55					60				
-	14		Asn	Ile	Glu	Glu	Met	Val	Ala	${\tt Gln}$	Leu	Arg	Asn	Ser	Ser	Glu	Leu	Ala
3	15		65					70					75					80
1	16		Gln	Arg	Lys	Cys	Glu	Val	Asn	Leu	${\tt Gln}$	Leu	Trp	Met	Ser	Asn	Lys	Arg
1	17						85					90					95	
1	18		Ser	Leu	Ser	Pro	Trp	Gly	Tyr	Ser	Ile	Asn	His	Asp	${\tt Pro}$	Ser	Arg	Ile
1	19					100					105					110		
2	20		Pro	Val	Asp	Leu	Pro	Glu	His	${\tt Gly}$	Ala	Cys	Val	Trp	Ala	Val		
. 2	21				115					120					125			